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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/534,615

12/14/2005

Guy Menchik

P-5390-US

7452

49443 7590 06/09/2009  
Pearl Cohen Zedek Latzer, LLP  
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EXAMINER

JARRETT, RYAN A

ART UNIT

PAPER NUMBER

2121

MAIL DATE

DELIVERY MODE

06/09/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/534,615	<b>Applicant(s)</b> MENCHIK ET AL.	
	<b>Examiner</b> RYAN A. JARRETT	<b>Art Unit</b> 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2009 and 18 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 40-54 is/are pending in the application.
- 4a) Of the above claim(s) 42-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 40 and 41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/11/09</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 05/11/09 was filed after the mailing date of the Non-Final Office Action on 07/18/08. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 40 and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Varnon et al. US 2003/0063138.

Varnon et al. discloses:

**40. A three-dimensional printing system to print a three-dimensional object, comprising:**

**one or more printing heads (e.g., Figs. 2-3 #14);**

**two or more cartridge apparatuses that provide building materials to said one or more printing heads to print said three-dimensional object (e.g., Figs. 2-3 #16);**

**two or more sensors that determine the status of building materials in said cartridge apparatuses** (e.g., [0049]: “Preferably, a sensor (not shown) is provided for each hopper 16 which detects a low condition of the hopper”); **and**

**a controller that receives data from said sensors and controls switching of building material supply from one cartridge to another** (e.g., [0055]: “a hopper may be dedicated to deliver a build material that is dispensed exclusively for building the three-dimensional object 20 while other hoppers may be dedicated to delivering a build material to be dispensed exclusively for forming a support structure for the three-dimensional object”).

**41. The system of claim 40, wherein each of said sensors is associated with a respective one of said cartridge apparatuses** (e.g., [0049]: “Preferably, a sensor (not shown) is provided for each hopper 16 which detects a low condition of the hopper”).

***Response to Arguments***

Applicant's arguments, see pages 1-2, filed 11/18/08, with respect to claims 40-54 have been fully considered and are persuasive. The rejection of claims 40-54 under 35 U.S.C. 112 2<sup>nd</sup> paragraph has been withdrawn in light of the amendment filed 11/18/08 (and re-submitted 03/05/09).

Applicant's arguments filed, see page 2, filed 11/18/08, have been fully considered but they are not persuasive. It is noted that the hoppers 16 and the printing head 14 of Varnon et al. (as depicted in Figs. 2-3) can clearly be considered separate entities, at least to the degree that the hoppers "provide building materials to said one or more printing heads" as recited in claim 1. It is noted that the material queue stations 18 of Varnon et al. (as depicted in claim 2) are not being relied upon by the examiner in the rejection below.

Applicant also argues that the hoppers 16 of Varnon et al. would not be considered "cartridges" or "cartridge apparatuses" by a person skilled in the art. But Merriam-Webster defines cartridge as "a case or container that holds a substance, device, or material which is difficult, troublesome, or awkward to handle and that usually can be easily changed". Examiner asserts that the hopper 16 of Varnon et al. qualifies as a container that holds a substance which is difficult, troublesome, or awkward to handle. And although one would probably not consider the hopper 16 of Varnon et al. to be capable of being easily changed, such is not required by the definition, due to the term "usually".

***Election/Restrictions***

Applicant's election with traverse of Group I, claims 40-54 in the reply filed on 05/22/08 is acknowledged. The traversal is on the ground(s) that the claims were amended to be patentably indistinct from each other and thus linked to form a single inventive concept. This is not found persuasive because there are still key distinctions between apparatus claim 40 and method claim 55 (it is noted that previously independent claim 63 has been amended to be in dependent form). For example, apparatus claim 40 does not require "determining parameters of said building material", or "controlling a supply of building material...according to said parameters" as required by method claim 55. And any features that claim 40 might share with claim 55 are not special, as evidenced by the prior art cited below (Varnon et al. US 2003/0063138).

The requirement is still deemed proper and is therefore made FINAL.

Claims 55-64 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 05/22/08.

Applicant's election of claims 40 and 41 in the reply filed on 11/18/08 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 42-54 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/18/08.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (571) 272-3742. The examiner can normally be reached on 10:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ryan A. Jarrett/  
Primary Examiner, Art Unit 2121

06/05/09